Please inform the Registrar’s Office if you choose an alternate option. Otherwise your Academic Advisement Report will be incorrect. Students entering in 2020 Mechanical Engineering Major Third Assistant Engineer’s License Option Divisions 3 & 4 Curriculum

Total Units: 162

Third Assistant Engineer’s License Courses are bolded. Additional units must be added to total for each semester.

**Fall 2020**
- Humanities Elective (Area C2-Lower Div) 3.0
- CHE 110 General Chemistry (Area B1) 3.0
- CHE 110L General Chemistry Lab (Area B3) 1.0
- EGL 100 English Composition (Area A2) “G4” 3.0
- EGL 120 Technical Communication (Area A1) “G4” 3.0
- ENG 110 Introduction to Engineering and Technology 1.0
- FF 200 Basic/Advanced Marine Firefighting 0.0
- MTH 210 Calculus I (Area B4) “G4” 4.0
- PE 101 Swim Competency Exam 0.0
- PE 102 Beginning/Intermediate Swimming 0.5
- Total 18.0

**Spring 2021**
- DL 105 Marine Survival 1.0
- DL 105L Marine Survival Lab 1.0
- EPL 200 Project Design I Lab 1.0
- EPL 201W Welding Lab 1.0
- NAU 104 Shipboard Security and Responsibility 1.0
- Total 19.0

**Summer Cruise 2021**
- CRU 150 Sea Training I (Engine) 8.0
- EPO 220 Diesel Engineering I 2.0
- Total 10.0

**Summer Cruise 2022**
- CRU 250 Sea Training II 8.0
- Total 8.0

**Fall 2021**
- ENG 210 Engineering Computer Programming 2.0
- EPO 210 Plant Operations II 1.0
- EPO 215 Manufacturing Processes 2.0
- ME 220 Computer Aided Engineering 3.0
- ME 230 Engineering Materials 3.0
- ME 232 Engineering Statics 4.0
- MTH 212 Calculus III (Area B4) 4.0
- PHY 205 Engineering Physics II (Area B1) 4.0
- Total 19.0

**Spring 2022**
- ENG 250 Electrical Circuits and Electronics 3.0
- ENG 250L Electrical Circuits and Electronics Lab 1.0
- EPO 214 Boilers 3.0
- EPO 230 Steam Plant System Operations 1.0
- ME 240 Engineering Thermodynamics 3.0
- ME 330 Engineering Dynamics 3.0
- MTH 215 Differential Equations (Area B4) 3.0
- Total 17.0

**Summer Cruise 2022**
- CRU 350 Sea Training III (Engine) 8.0
- Total 8.0

**Fall 2022**
- Life Science Elective (Area B2) 3.0
- EPO 235 Steam Plant Watch Team Management 1.0
- EPO 312 Turbines 3.0
- EPO 322 Diesel Engineering II/Simulator 1.0
- EPO 322L Diesel Engineering II/Simulator Lab 1.0
- ME 340 Engineering Fluid Mechanics 3.0
- ME 350 Electromechanical Machinery 3.0
- ME 350L Electromechanical Machinery Lab 1.0
- ME 360 Instrumentation and Measurement Systems 2.0
- ME 360L Instr. and Measurement Systems Lab 1.0
- Total 13.0

**Spring 2023**
- EPO 310 Plant Operations III 1.0
- EPO 343 Refrigeration & A/C 1.0
- EPL 490 Project Design II Lab 1.0
- ME 490L Project Design II Lab 1.0
- Total 17.0

**Summer Cruise 2023**
- CRU 350 Sea Training III (Engine) 8.0
- Total 8.0

**Fall 2023**
- American Institutions I Elective (Area D-Lower Div) 3.0
- Social Science Elective (Area D-Lower Div) 3.0
- ENG 430 Naval Architecture 3.0
- ME 349 Fluid/Thermal Lab 2.0
- ME 394 Fluid/Thermal Design 2.0
- ME 492 Project Design I 2.0
- ME 492L Project Design I Lab 1.0
- STEM 2 Stem Course (See Box) 3.0
- Total 16.0

**Spring 2024**
- Humanities Elective (Area C-Upper Div) 3.0
- EPO 217 Shipboard Medical 1.0
- GOV 200 American Government 3.0
- HUM 310 Engineering Ethics (Area C2-Upper Div) 3.0
- ME 494 Project Design II 1.0
- ME 494L Project Design II Lab 1.0
- STEM 3 Stem Course (See Box) 3.0
- Total 16.0

**Third Assistant Engineer’s/OCIEW License Required for Graduation**

CSU Writing Proficiency Requirements may be met by passing the Graduate Writing Exam, or passing EGL 300 Advanced Writing.

“G4” “Golden 4” Courses (Must receive a “C-” or higher) ► STCW Courses (Must receive a “C-” or higher, or “CR”) ⦿ Courses in Major (CGPA = 2.0 is required)

**STEM Courses**

**Energy Design Stem**
- 1 - ME 440 Advanced Fluids & Thermodynamics (Spring 2023) ●
- 2 - ME 442 Heating, Ventilation, and A/C Design (Fall 2023) ●
- 3 - ME 444 Energy Systems Design (Spring 2024) ●

**Mechanical Design Stem**
- 1 - ME 436 Mechatronic System Design (Spring 2023) ●
- 2 - ME 430 Mechanial Vibrations (Fall 2023) ●
- 3 - ME 432 Machinery Design (Spring 2024) ●